

Within the spectrum of autoimmune disease, such populations should be considered the opposite extremes, modulated by the thymus, as far as immune response is concerned, on the basis of a prevalence of one or the other pathologic form, both strictly related to the intake or withdrawal of steroids.

Key words: myasthenia gravis; systemic lupus erythematosus.

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Contact urticaria from stock, a Cruciferae plant

Stock (*Matthiola incana*) is an ornamental plant of the Cruciferae family, which also includes cabbage, cauliflower, Brussels sprouts, turnips, radishes, red cabbage, caper, rape, and mustard.

■ A 28-year-old male student suffered from seasonal rhinoconjunctivitis and oral allergy syndrome with facial edema after eating the seeds of broad beans. He had a 5-year history of contact urticaria (CU) 15 min after handling dry sheath with seeds of stock for sowing while gardening. The urticaria resolved completely 30 min after contact ceased. He ate vegetables of the Cruciferae family and legumes without problems. He had not eaten mustard in the last few years but had previously tolerated it.

Skin prick tests (SPT) were performed with the

usual inhalant antigens, commercial extracts of legumes (Aristegui), mustard 10% w/v (Bencard), our own extracts of fresh legumes, fresh Cruciferae vegetables, and dry stock sheaths (SS). The extracts of fresh vegetables were obtained by liquefaction with a domestic blender. After centrifugation, the fluid was put through a Millipore filter. The dry SS was triturated with a coffee grinder, and 2 g of it was homogenized with 20 ml of PBS. After filtration and centrifugation, the fluid was filtered through a Millipore filter (1/10 w/v concentration). Histamine and saline serum were used as controls. The SPT were considered positive if the largest diameter of the wheal was equal to or larger than 3 mm. The results of SPT are shown in Table 1. SPT with the previous extracts were negative in 20 atopic controls, 10 of them with positive SPT to pollens.

The rub test was carried out by delicately rubbing the forearm for 30 s with dry SS, and it showed

Although he was RAST-negative to stock, an IgE-mediated mechanism is likely for the urticaria in this atopic patient.

Table 1 Results of skin prick tests and specific IgE

Allergens	Prick (mm)	Specific IgE in kU/l (class)
Histamine	5	
Inhalants		
<i>Lolium perenne</i>	5.5	26.50 (4)
<i>Olea europaea</i>	9	7.15 (3)
<i>Artemisia vulgaris</i>	6.5	2.61 (2)
<i>Chenopodium album</i>	5.5	2.15 (2)
<i>Salsola kali</i>	4	1.47 (2)
Mites, molds, and danders	0	Not done
Legumes		
French bean	4.5	4.7 (3)
Broad bean sheath	4	Not done
Broad bean seed	4.5	Not done
Hanicot bean	0	< 0.35 (0)
Chickpea	0	< 0.35 (0)
Lentil	0	0.55 (1)
Peanut	0	4.52 (3)
Cruciferae vegetables		
Stock sheath	6	0 (0)
Mustard	8.5	0.95 (2)
Cabbage	7.5	1.19 (2)
Cauliflower	6.5	2.80 (2)
Brussels sprout	4	0.90 (2)
Turnip	4	Not done
Red cabbage	6	Not done
Radish	0	Not done

local urticaria after 15 min. This test was negative in five controls. The oral challenge with mustard sauce was negative.

Total IgE was 157 kU/l. The results of specific IgE are shown in Table 1. All determinations were made by the Pharmacia CAP System except for stock. The extract of SS was coupled with cyanogen bromide-activated filter paper disks, and specific IgE was determined by radioimmunoassay (RIA). The specific IgE against stock was negative.

■ Type I hypersensitivity to mustard and to other members of the Cruciferae family has been described (1-6). We report a case of CU due to dry SS handling. SPT with the extract of dry SS was positive, as was the challenge test (rub test). Although we could not find specific IgE to stock, we think this was an immunologically mediated CU, probably by an IgE mechanism. To our knowledge, this patient is the first stock allergy case reported in medical literature.

Cross-sensitivity between the members of the Cruciferae family has been discussed, but not all authors have recognized it. Some authors did not detect cross-sensitivity with other Cruciferae in patients with mustard allergy (3-5). Armentia et al. (1) found cross-sensitivity between turnip pollen and other Cruciferae vegetables on the basis of clinical data, SPT, and specific IgE. Blaiss et al. (2) described positive SPT to mustard, cauliflower, and broccoli in a case of anaphylactic shock from cabbage. Panconesi et al. (6) found positive SPT to Cruciferae vegetables in a patient with mustard allergy. In our patient, we found positive SPT with elevated specific IgE to other vegetables of the Cruciferae family but with good tolerance of the ingestion of all of them. Antigenic similarity or shared antigens between members of the Cruciferae family may explain this cross-reactivity (7).

Key words: contact urticaria; cruciferae; matthiola incana; stock allergy.

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Occupational asthma caused by mink urine

THE MINK (*Mustela vison*) is a small, carnivorous mammal of the Mustelidae family; the progressive increase over the last 50 years in the breeding in captivity of this animal has been one of mainstays of the development of the fur industry. We report for the first time a case of occupational asthma caused by mink urine.

■ A 32-year-old man, a nonsmoker, and nonatopic, started work in January 1984 on a mink farm. Six months later, he began to suffer from episodes of dry cough, dyspnea, wheezing, rhinoconjunctival itching, sneezing, and rhinorrhea during the working day. In the months of April and May, during the mink breeding season, he had several intense bronchospasm attacks, requiring emergency room treatment. He remained asymptomatic during weekends and holidays.

At the study, the physical examination was normal. Hematology and blood biochemistry showed no alterations. Chest and paranasal sinus X-rays were normal. Total IgE was 47 IU/ml. Spirometry showed the following values: FVC 4.90 l (87% of predicted value), FEV₁ 3.00 l (69% of predicted value), and Tiffenau 61%. The bronchial provocation test with histamine was positive (PC₂₀ FEV₁: 5 mg/ml).

A new animal species with potent allergens in the urine.

■ A sample of mink pelt was defatted in ether and extracted in Coca's solution, dialyzed against distilled water, and sterilized by filtration.

Urine was collected by bladder massage and subsequently pooled. It was centrifuged at 10 000 g for 10 min and dialyzed for 24 h at 4°C against PBS. Protein concentration was assessed by the Lowry method.

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